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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/683,847	02/21/2002	Tsung-Yueh Shih	ALIP0002USA	9675

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(NAIPC) NORTH AMERICA INTERNATIONAL PATENT OFFICE
P.O. BOX 506
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EXAMINER	
CHAUDRY, MUJTABA M	

ART UNIT	PAPER NUMBER
2133	

DATE MAILED: 12/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/683,847	SHIH ET AL.	
	Examin r	Art Unit	
	Mujtaba K Chaudry	2133	

-- Th MAILING DATE of this communication appears on th cov r sheet with the corr spondenc address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 February 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11* is/are rejected.

7)☒ Claim(s) *1-11* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 February 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

The drawings filed February 21, 2002 are accepted.

Specification

The disclosure is objected to because of the following informalities:

- The title is written awkwardly with brackets. Applicant is requested to rewrite the title Using proper font. For example, "Improved Encoding Method for an Optical Recorder".
- The title is not needed on the abstract page and therefore should be removed. Only "Abstract of Disclosure" is fine.
- The heading "Specification" is not needed on top of page 1 of the specification. The title is sufficient.

Appropriate correction is required.

Claim Objections

Claim 1, 2, 4-6 and 9-10 are objected to because of the following informalities:

- Indentation is needed after the preambles of the claims. Furthermore, the Examiner has noted that Applicants use the term "comprise" or "comprising" more than once in a single claim. This is not customary and should be avoided since the term comprise (and its different forms) is generally used to separate the preamble from the body of the claim.

Appropriate correction is required.

Allowable Subject Matter

Claims 4-11 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, 35 U.S.C. 101 and claim objections set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-11 are rejected under 35 U.S.C. 101 because the language of the claim raises a questions as to whether the claim is directed merely to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 USC 101. It is not clearly described what the encoder is used for and thus there is no usefulness. For example, if data U is encoded with the identity matrix I (I(U) = U), then the encoder does not render any utility.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the

specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. According to the claim there is only a single limitation in the claim which is, "receiving data of a next mode..." This is referred to as a Single Means Claim. See MPEP 2164.08(a). Applicant is requested amend claim as necessary, perhaps with one claims that contain allowable subject matter.

- Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite in that it fails to point out what is included or excluded by the claim language. This claim is an omnibus type claim.

- Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. It is not clear how the next mode and current mode are related to the encoding process.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Honjo (USPN 5379120) further in view of Oda et al. (USPN 6044199).

As per claim 1 Honjo substantially teaches (col. 4) an optical disc apparatus for recording a digital signal on a recording disk in a recording mode and for reproducing the recorded digital signal in a reproduction mode, comprising: a recording signal processor, said processor in a first processing mode, compression-coding and modulating an input signal to obtain n channels of first modulated coded signals having a bit rate A1, wherein n is a positive integer at least equal to one, and, in a second processing mode, compression-coding and modulating the input signal to obtain substantially n.times.A2/A1 channels of second modulated coded signals having a bit rate A2 which is higher than the bit rate A1; a disk driver, said disk driver driving said recording disk to rotate at a specified substantially constant rotating speed or at a specified substantially linear velocity; a mode specifier, said mode specifier controlling said recording signal processor in said recording mode to operate either in said first processing mode or in said second processing mode; an optical recorder and reproducer having n.times.A2/A1 recording/reproducing channels for recording on said recording disk said n channels of first modulated coded signals through n recording/reproducing channels of said n.times.A2/A1 recording/reproducing channels when said recording signal processor is operating in said first processing mode and for recording said n.times.A2/A1 recording/reproducing channels when said recording signal processor is operating in said second processing mode, and for reproducing from said recording disk the recorded n channels of first modulated coded signals through said n recording/reproducing channels to obtain n channels of reproduced first modulated coded signals having the bit rate A1 when signals to be reproduced are said first modulated coded signals and for reproducing the recorded

n.times.A2/A1 channels of second modulated coded signals through said n.times.A2/A1 recording/reproducing channels to obtain substantially n.times.A2/A1 channels of reproduced modulated coded signals having the bit rate A2 when the signals to be reproduced are said second modulated coded signals; a reproduced signal processor, said processor in a first processing mode, demodulating and decoding said n channels of reproduced first modulated coded signals to obtain a reproduced digital signal and, in a second processing mode, demodulating and decoding said substantially n.times.A2/A1 channels of reproduced second modulated coded signals; a mode controller, said controller controlling said reproduced signal processing means to operate in said first operating mode when the signals to be reproduced are said first modulated coded signals and to operate in said second mode when the signals to be reproduced are said second modulated coded signals.

Honjo does not explicitly teach a computer in process of encoding the data as stated in the present application.

However, Oda et al. (herein after: Oda) teaches, in an analogous art, (title and abstract) an authoring system comprising an audio signal and a video signal that are encoded by an encoder and converted to one system of serial data, operation can be smoothly executed by simple constitution, compared with heretofore and the progress of processing in each device can be grasped. A condition set by a user is stored in a file and the file is shared among the encoder and others. Oda teaches (col. 1-2) that various conditions can be collectively set via a computer by collectively controlling the operation of the whole system by the one computer and the progress of processing in each device can be grasped. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a computer in process of

encoding the data within the teachings of Honjo. This modification would have been obvious to one of ordinary skill in the art because one of ordinary skill in the art would have recognized that using a computer based system would enhance the overall encoding process.

As per claim 2, Oda substantially teaches, in view of above rejections, (col. 3) the encoder 12C is operated under control by the controller 12B and encodes a digital video signal output from the video tape recorder 12A according to run-length encoding and outputs an elementary stream D1. At this time, the encoder 12C generates one delimited elementary stream D1 every digital video signal selectively output from the video tape recorder 12A and stores each generated elementary stream D1 in a hard disk (HDD) 13 as one file via a small computer system interface (SCSI).

As per claim 3, Oda substantially teaches, in view of above rejections, (col. 2) a streamer 19 is constituted by an interface which accesses to the hard disk 13 via SCSI and a computer for controlling the interface and when the instruction of the start of processing is input via communication by way of a socket between the streamer and the main controller 14, the streamer accesses to the authoring file 15 stored in the main controller 14. When the streamer 19 receives the instruction of recording from the main controller 14, the streamer reads the multiplex stream from the hard disk 13 and writes it on a recording medium such as a tape.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicants are invited to review/read additional pertinent prior art documents cited in PTO-892 attached.

Any inquiries concerning this communication should be directed to the examiner, Mujtaba Chaudry who may be reached at 571-272-3817. The examiner may normally be reached Mon – Thur 6:30 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, please contact the examiner's supervisor, Albert DeCady at 571-272-3819.

Mujtaba Chaudry
Art Unit 2133
December 2, 2004

Guy J. LAMARRE
PRIMARY EXAMINER